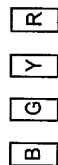


FIG. 1
PRIOR ART

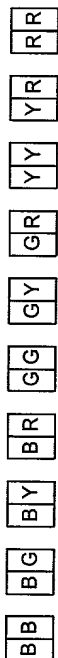
$$N$$

UNIQUE
COLORS



$$\frac{N^2 + N}{2}$$

UNIQUE PAIRS



2^N

BINARY CODES

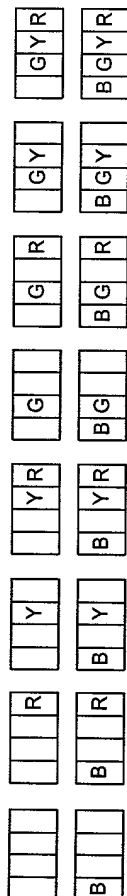


FIG. 2

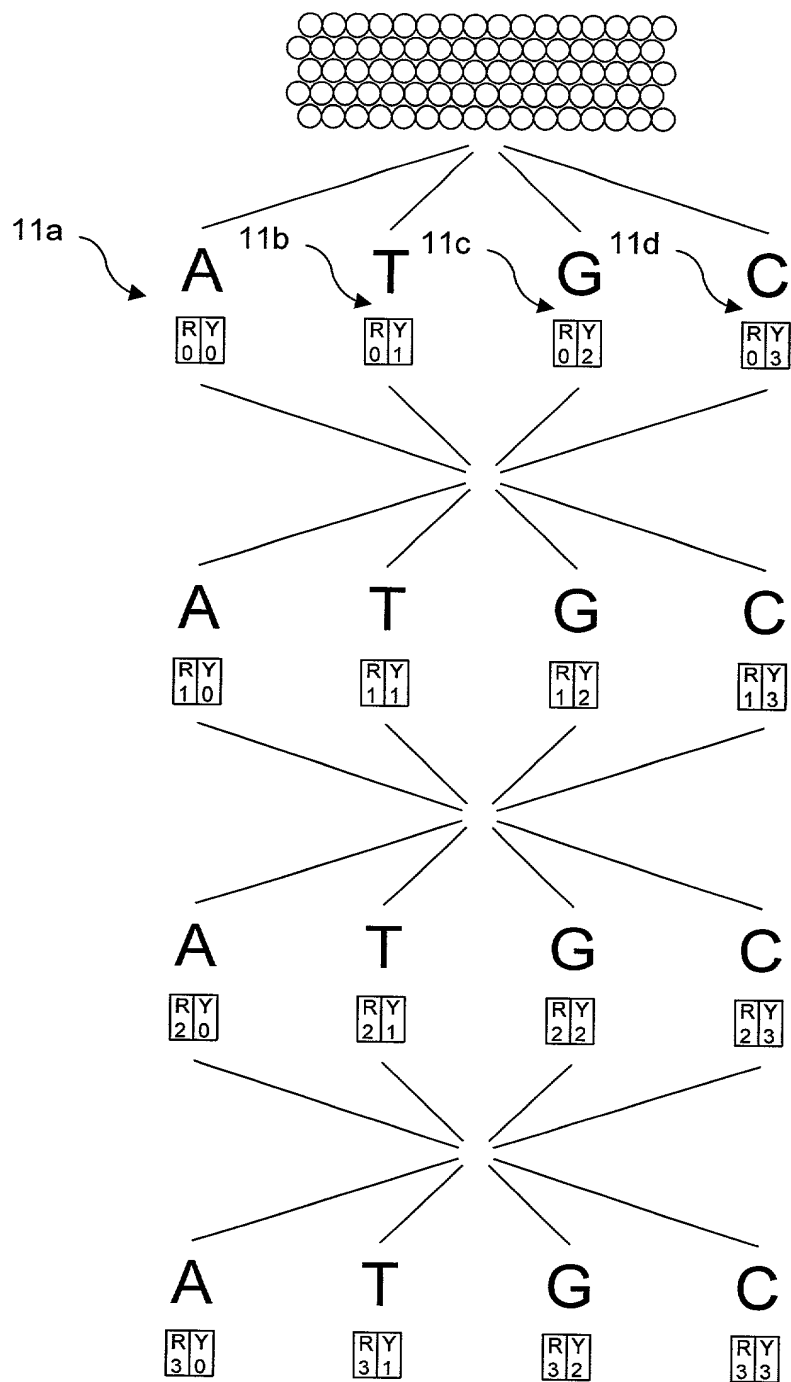


FIG. 3

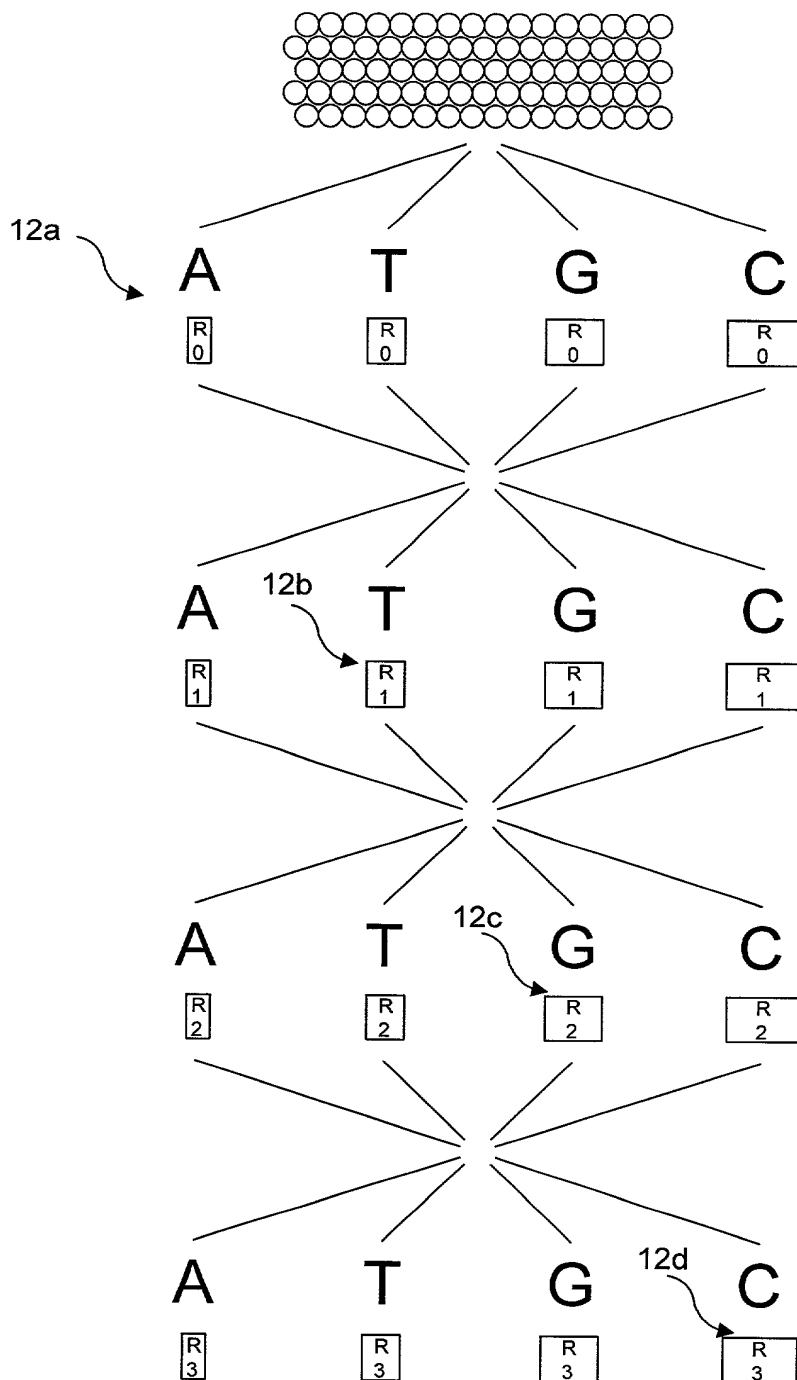


FIG. 4

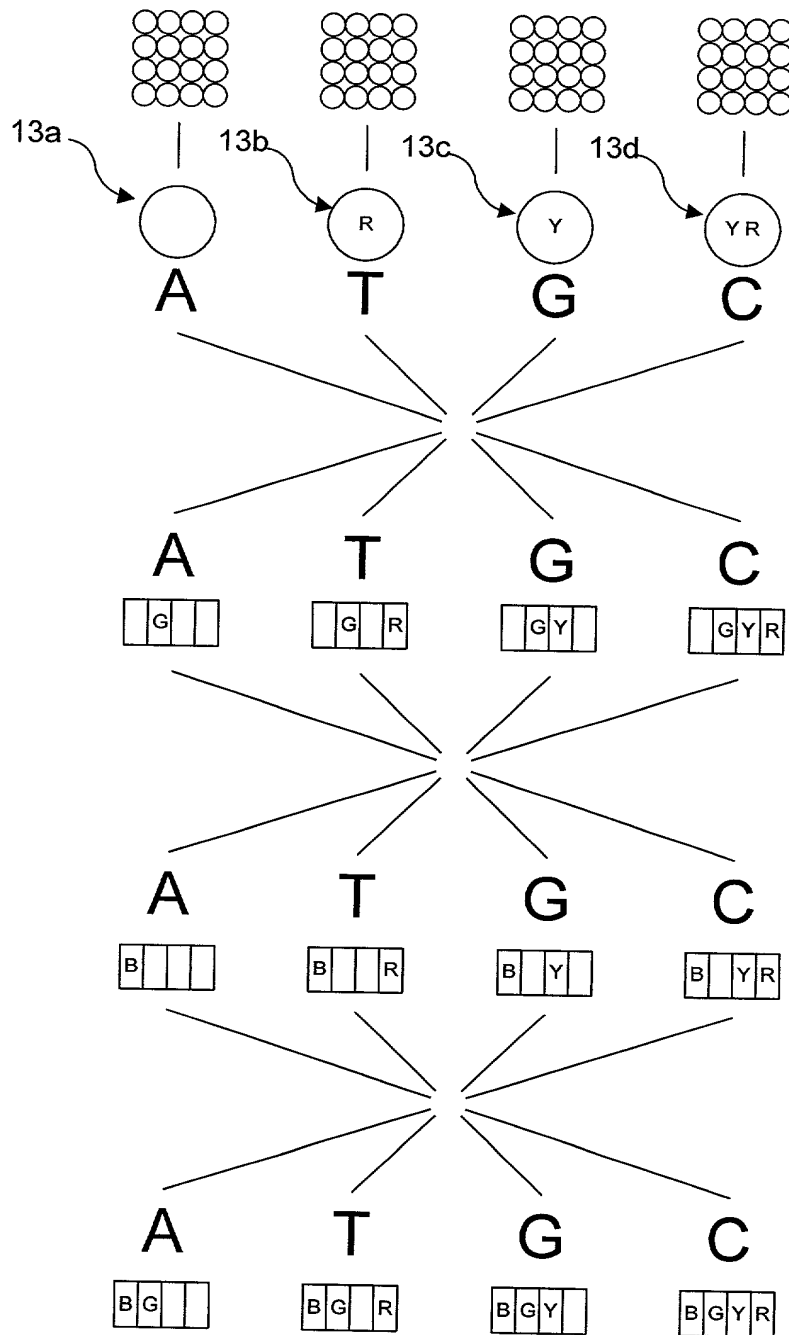


FIG. 5

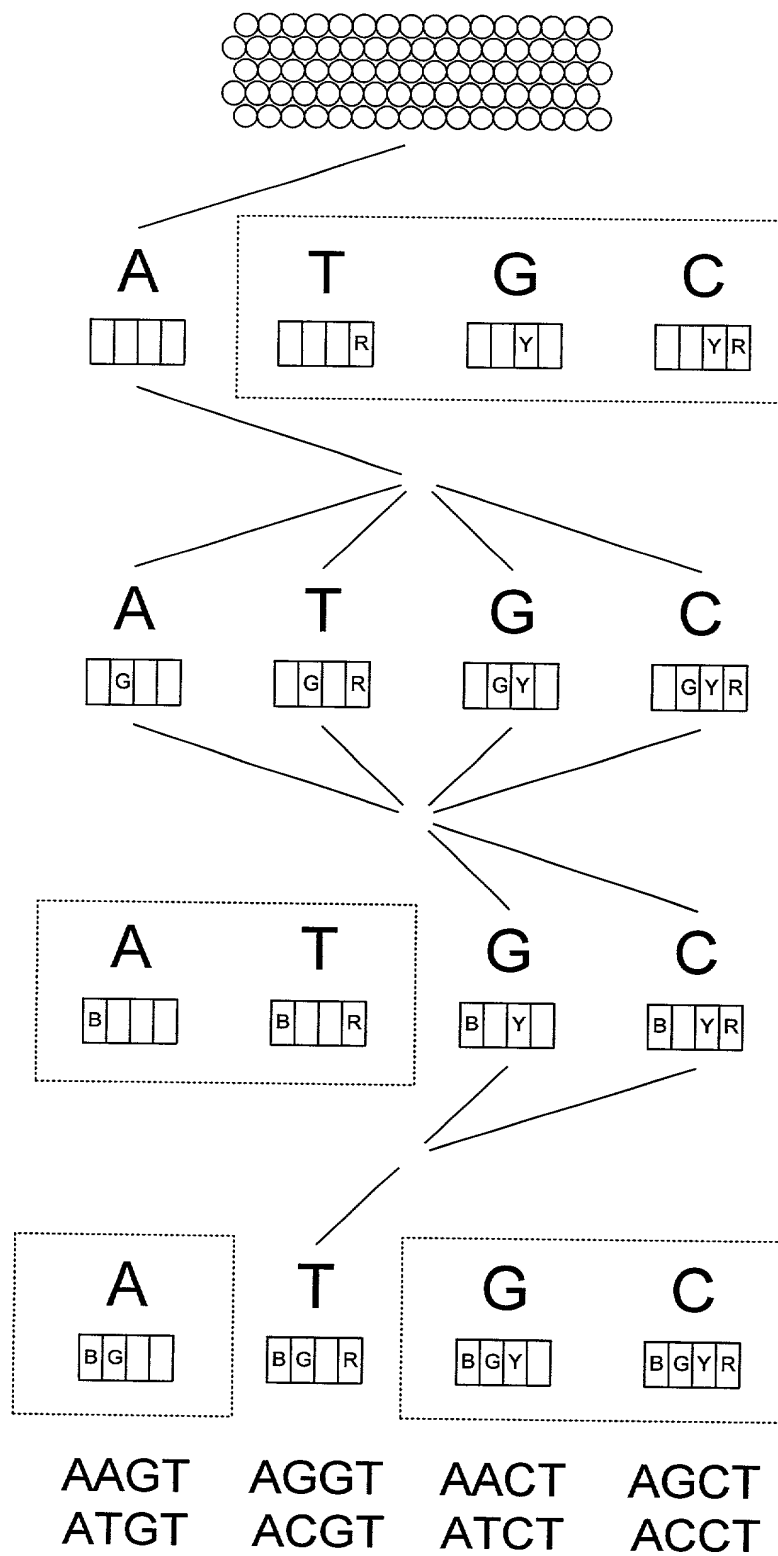


FIG. 6

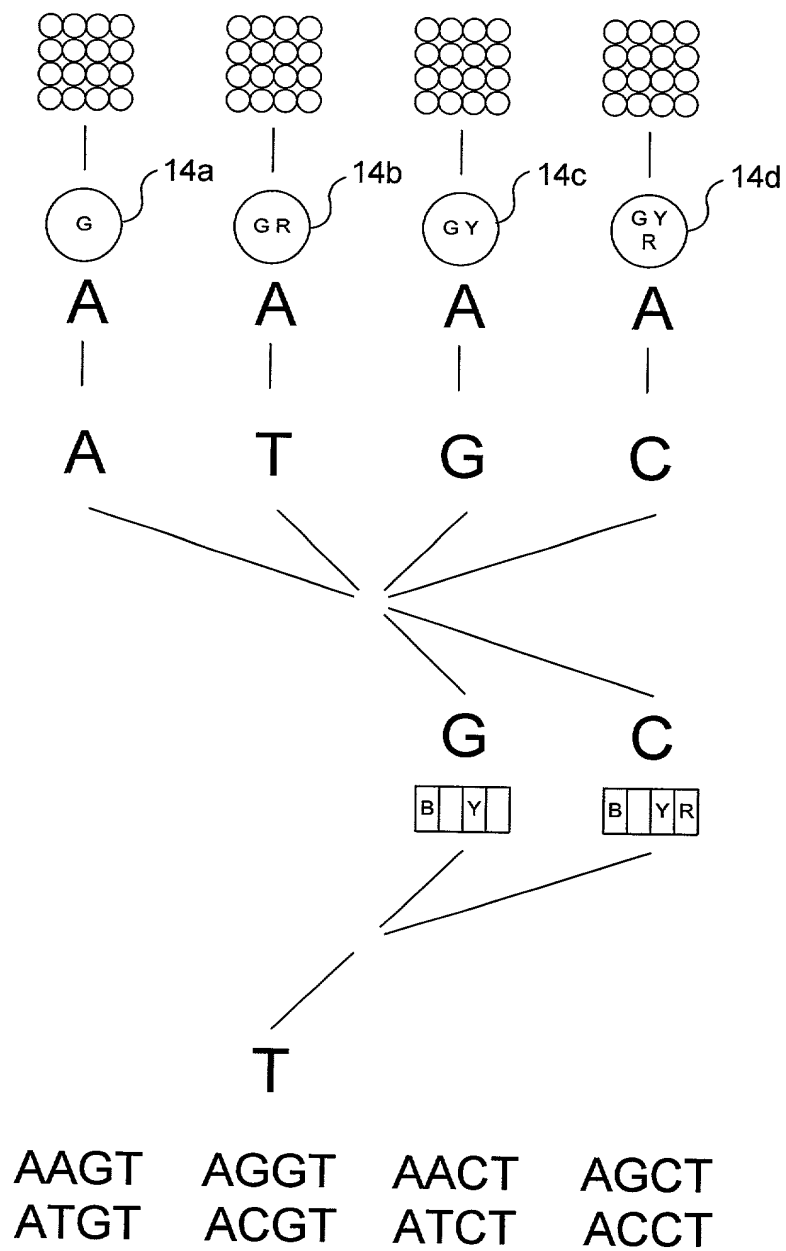
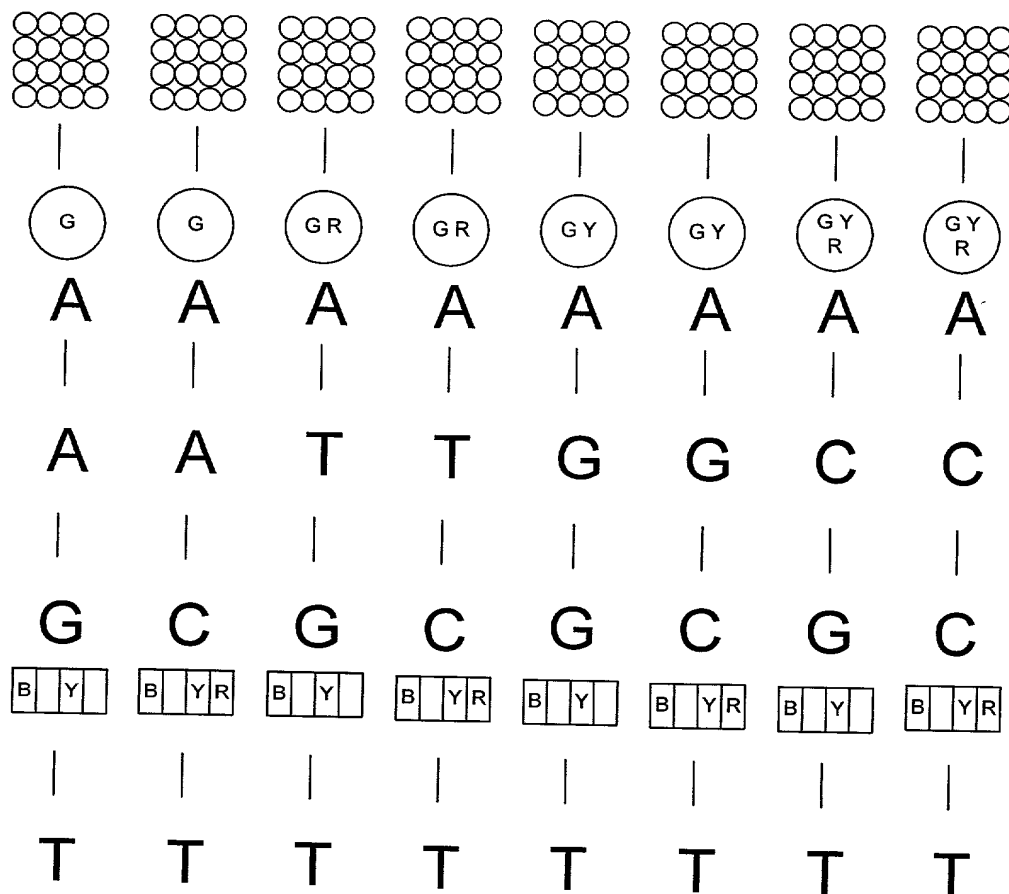


FIG. 7



AAGT AGGT AACT AGCT
 ATGT ACGT ATCT ACCT

FIG. 8

FIG. 10 is a schematic diagram of a reporter bead array. The array is organized into columns and rows. The columns are labeled: REPORTER LABELED BEAD, LASER SCATTER, BINDING SIGNAL, and REPORTER SIGNATURE. The rows are labeled: CGTA, TCCC, and GTCA. The REPORTER SIGNATURE column is further divided into four color-coded regions: BLUE, GREEN, YELLOW, and RED. The array shows various patterns of dots representing beads or signals within each cell.

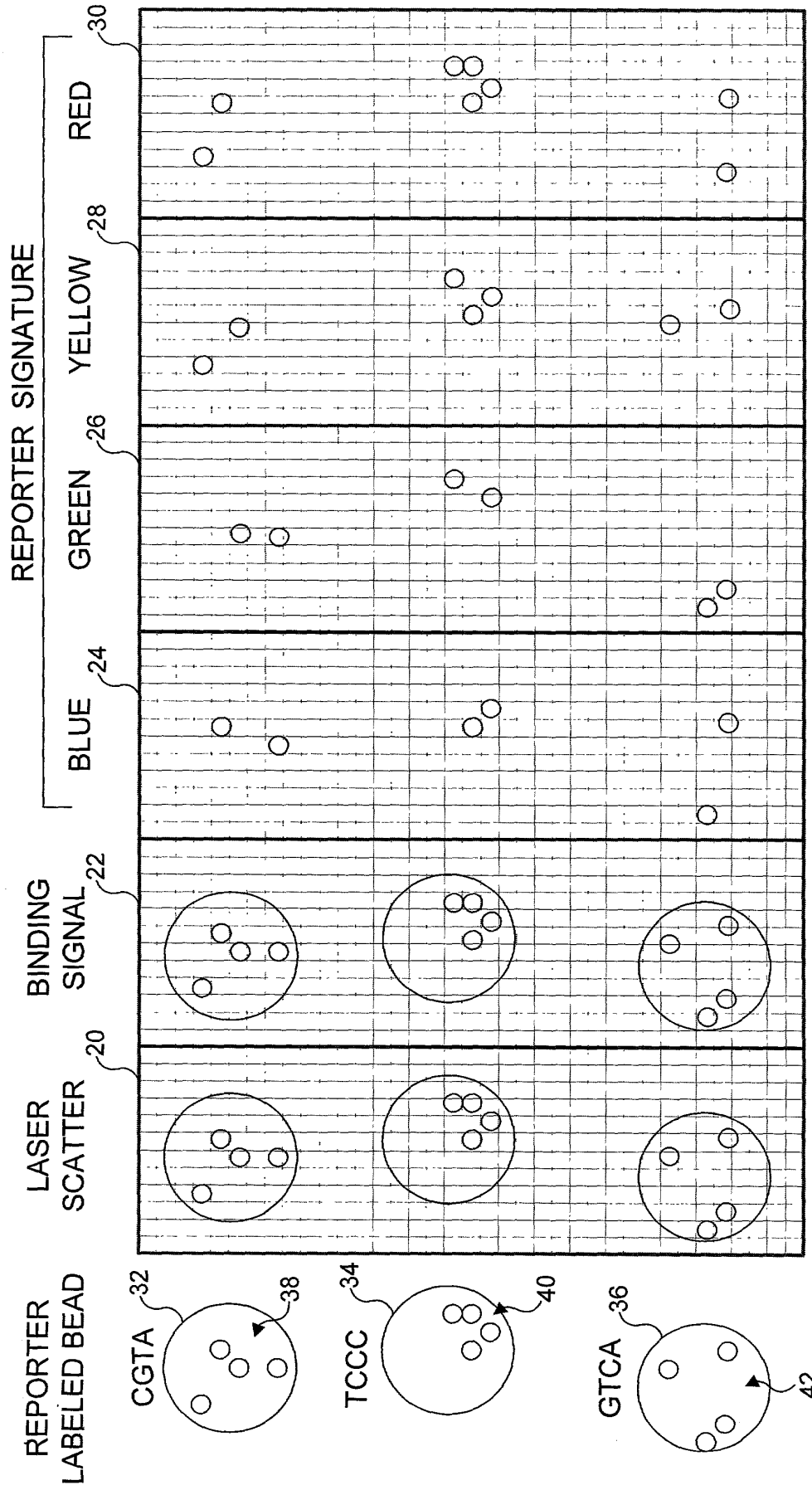


FIG. 10

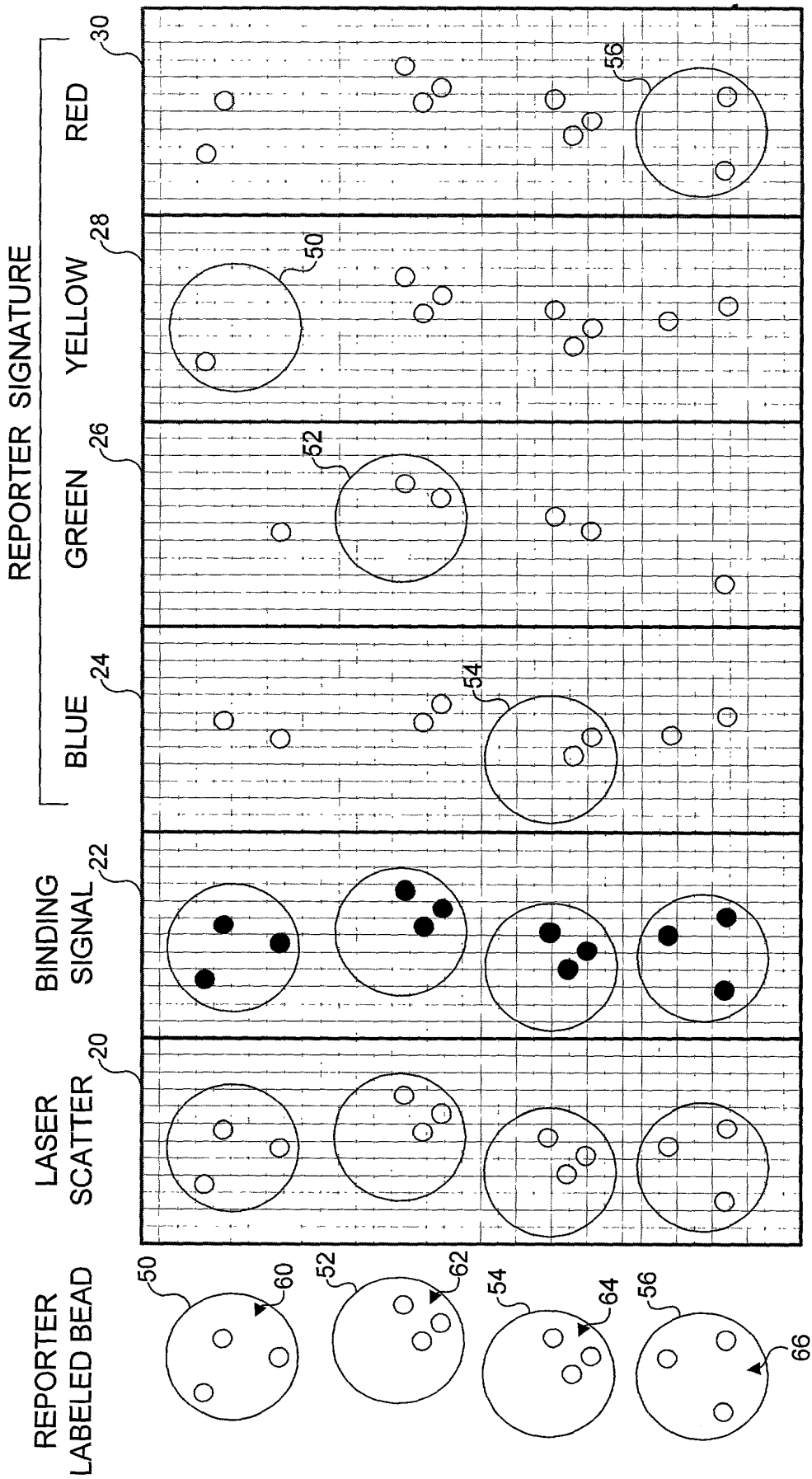


FIG. 11

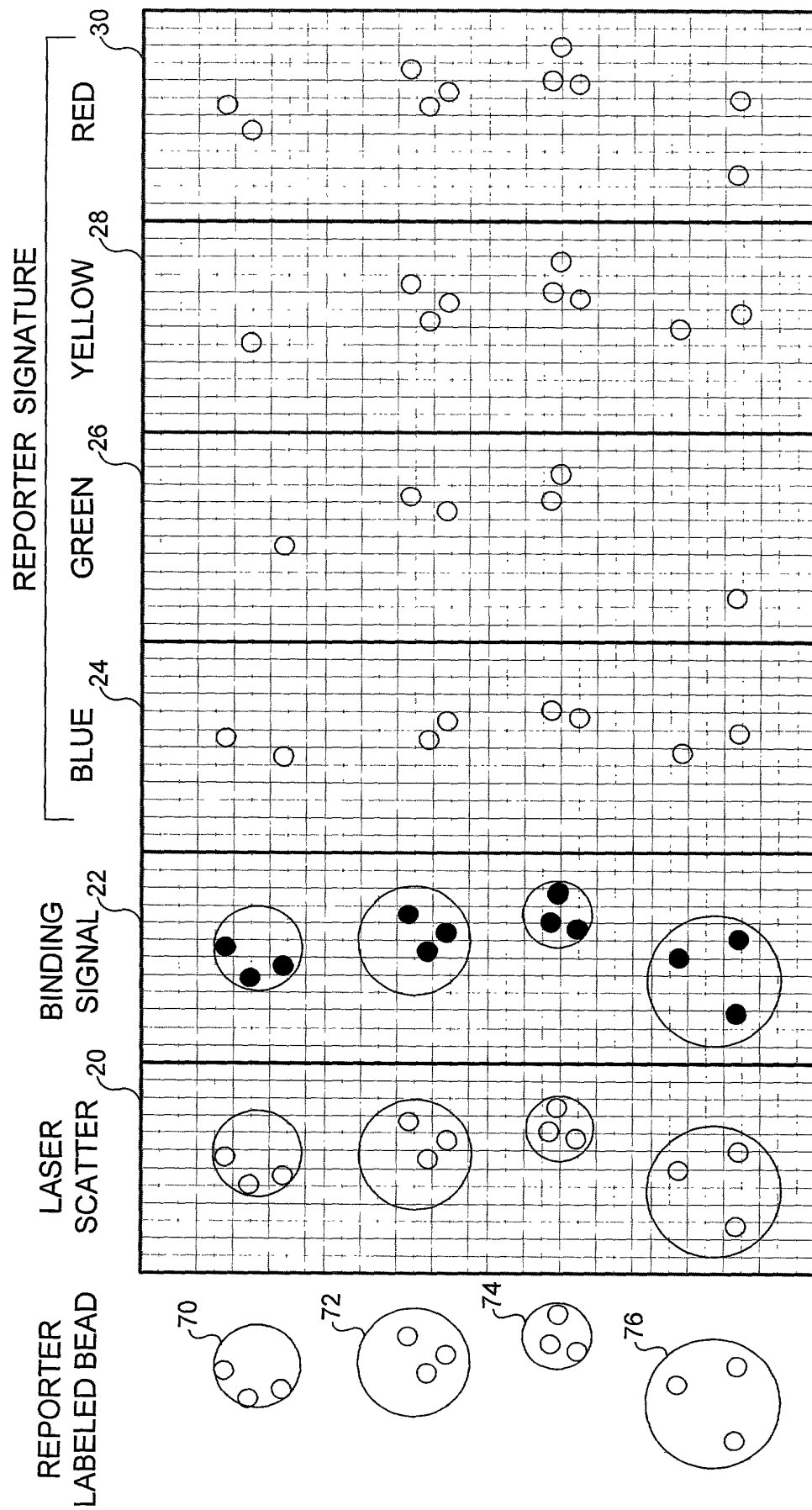


FIG. 12

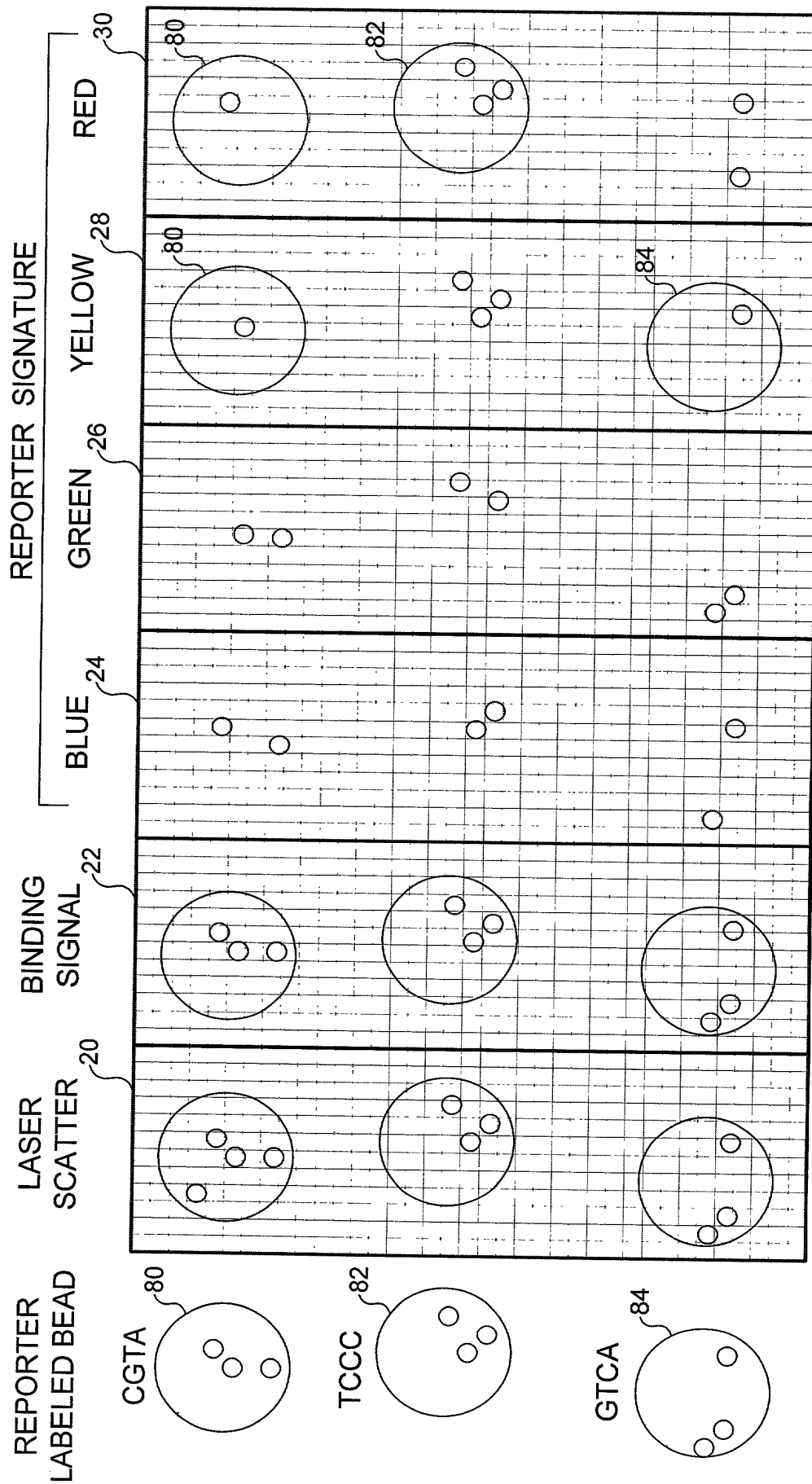


FIG. 13

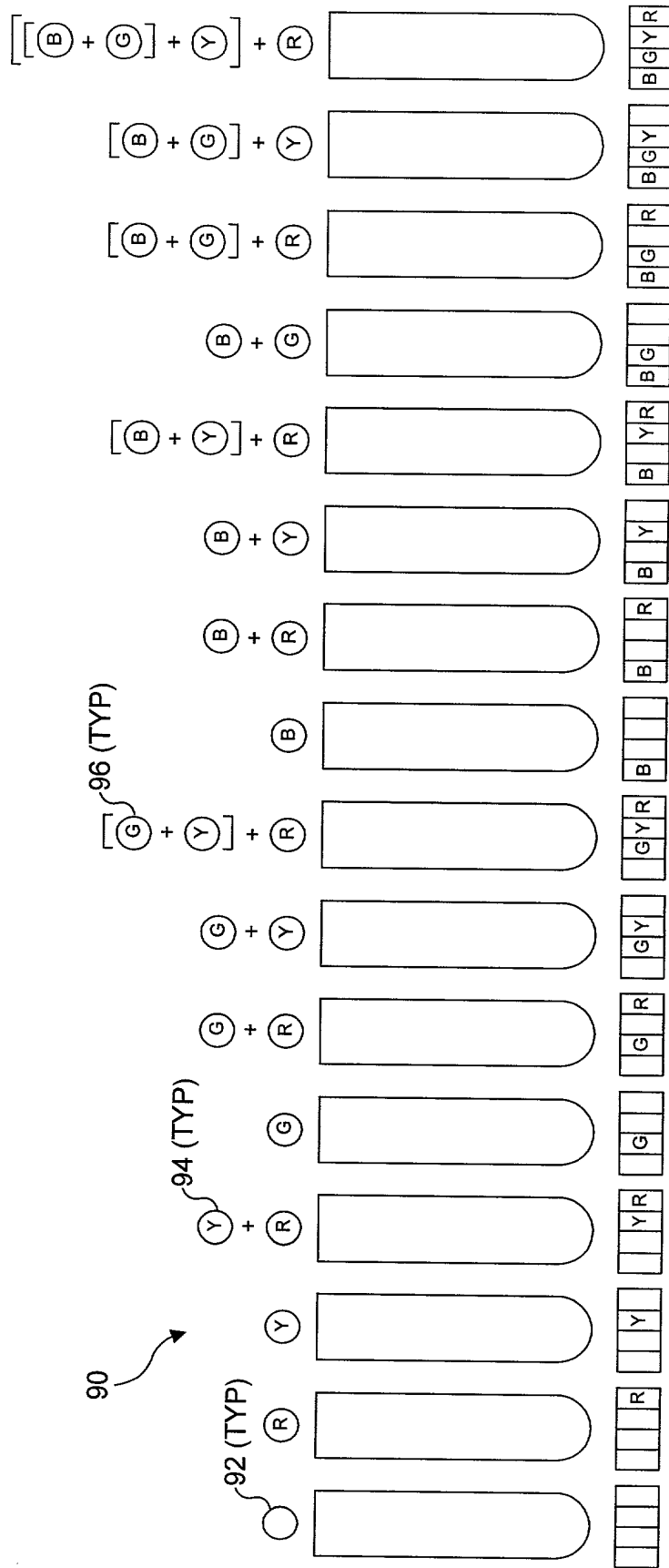


FIG. 14